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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,626	02/13/2001	Saki Itzhak Hakim	U 013260-3	2754
140	7590	12/12/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			AHMED, SAMIR ANWAR	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/782,626

Applicant(s)

HAKIM ET AL.

Examiner

Samir A. Ahmed

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 44-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25 and 44-68 is/are allowed.
- 6) ☒ Claim(s) 26-28, 69-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

1. The amendment filed 9/25/06 have been entered and made of record.
2. The amendment to the Specification and to Figs 1 and 3 had been accepted.
3. Applicant's arguments with respect to claims 26-28, and 69-71 have been considered but they are not persuasive for the following reasons:

Applicant alleges, " The Examiner admits [,]" (page 16, line 15- page 17, line 18). The Examiner disagrees. Firstly, the Examiner never admitted that the specification as originally filed is enabling for applying the enhanced contrast representation to a third representation of the electrical circuit. The Examiner has clearly stated that While the specification as originally filed is enabling for applying the enhanced contrast representation 146 in Fig. 3 to the output of a third image (red image) of the circuit board convolved with a Laplacian of a Gaussian function 162 in Fig. 3 to provide an enhanced representation 29 for use in inspection, the specification as originally filed is not enabling for any third representation of the electrical circuit as recited in the claim. The third image representation of the electrical circuit could be the red image of the electrical board, a third image of a reference electrical circuit corresponds to the electrical circuit inspected or an enhanced third image enhanced by convolution with any function other than Laplacian function or enhanced by any other way other than convolution. The specification as originally filed only discloses an embodiment shown in Fig.3 that discloses, applying the enhanced contrast representation 146 in Fig. 3 to the output of a third image (red image) of the circuit board convolved with a Laplacian of a Gaussian function 162 in Fig. 3 to provide an enhanced representation 29 for use in inspection. Nowhere in the original specification, an embodiment that discloses any of

the other third representations of the electrical circuit outlined above exits. Secondly, in absence of any disclosure of a third representation anywhere in the originally filed specification including the preferred embodiment Fig.3, the third representation is limited to the third image.

Applicant alleges, " As noted by the Examiner admits [,]" (page 19, lines 7-16). The Examiner disagrees. Colvin discloses obtaining the three images from the same circuit to be inspected (col. 7, line 65-col.8, line 29).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 26-28, 69-71 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The grounds for rejections stated in paragraph 7 of the Office Action mailed on 4/21/06, are incorporated by reference herein.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 26-27 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaminsky, Roland et al. (WO 00/11454) and Colvin (US Patent 5,970,167). The grounds for rejections stated in paragraph 11 of the Office Action mailed on 4/21/06, are incorporated by reference herein.
8. Claims 28, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaminsky, Roland et al. (WO 00/11454) and Colvin (US Patent 5,970,167) as applied to claims 26 and 69 above and further in view of Bishop (US Patent 6,603,877). The grounds for rejections stated in paragraph 12 of the Office Action mailed on 4/21/06, are incorporated by reference herein
9. Claims 1-25, 44-68 allowed.
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2624

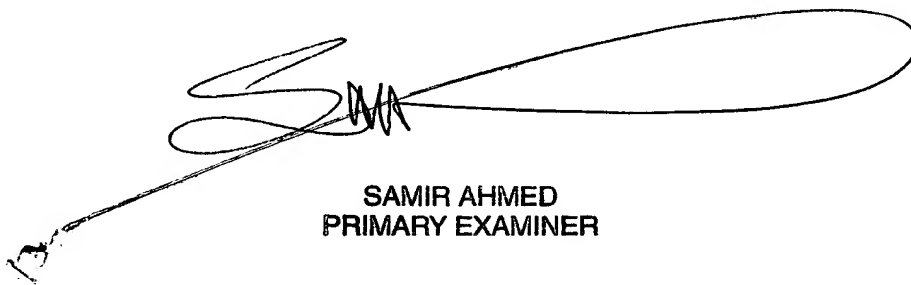
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir A. Ahmed whose telephone number is (571) 272-7413. The examiner can normally be reached on Mon-Fri 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

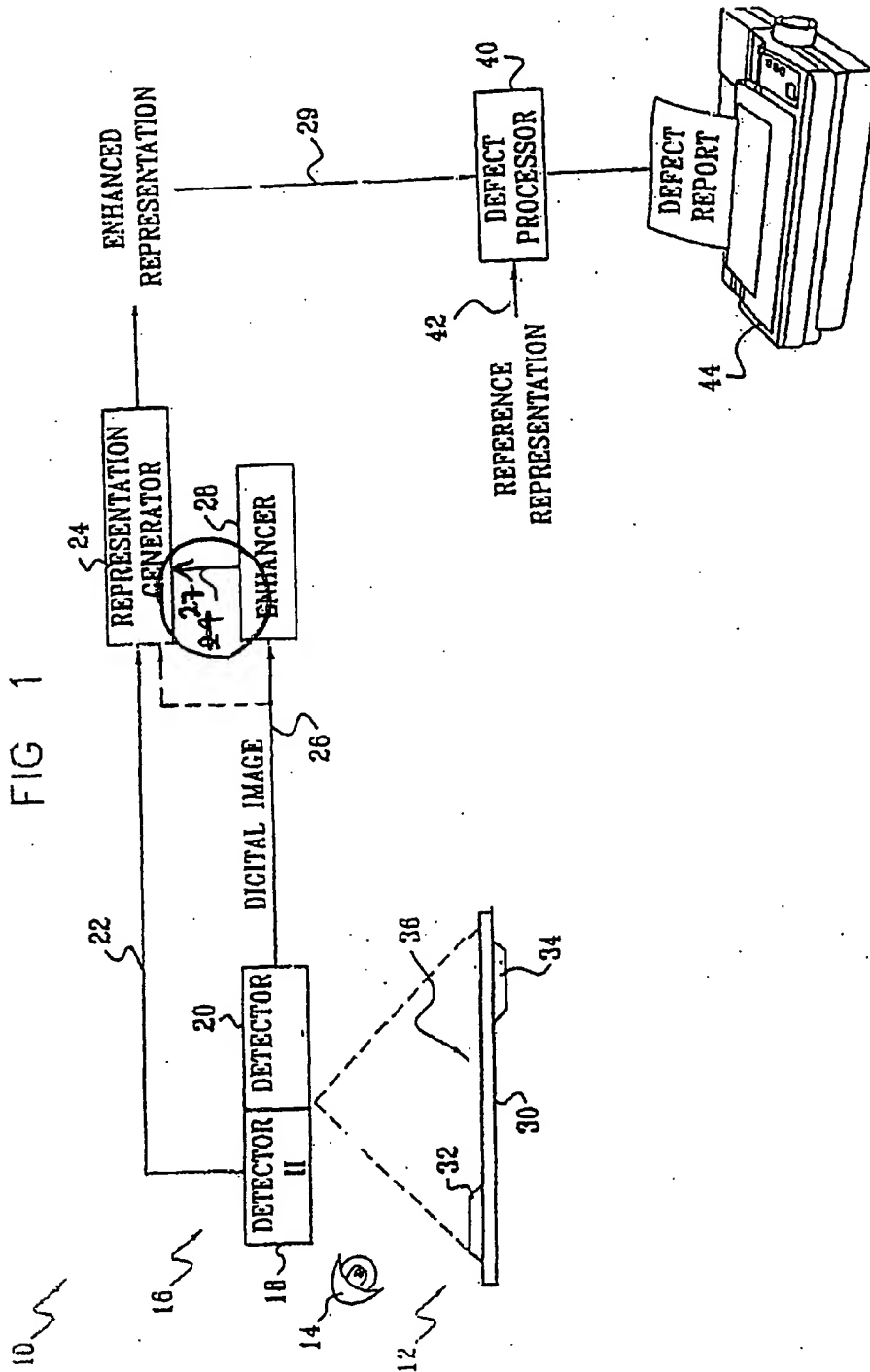
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA



SAMIR AHMED  
PRIMARY EXAMINER

ok to enter  
SA  
12/8/06



ok to enter  
SA  
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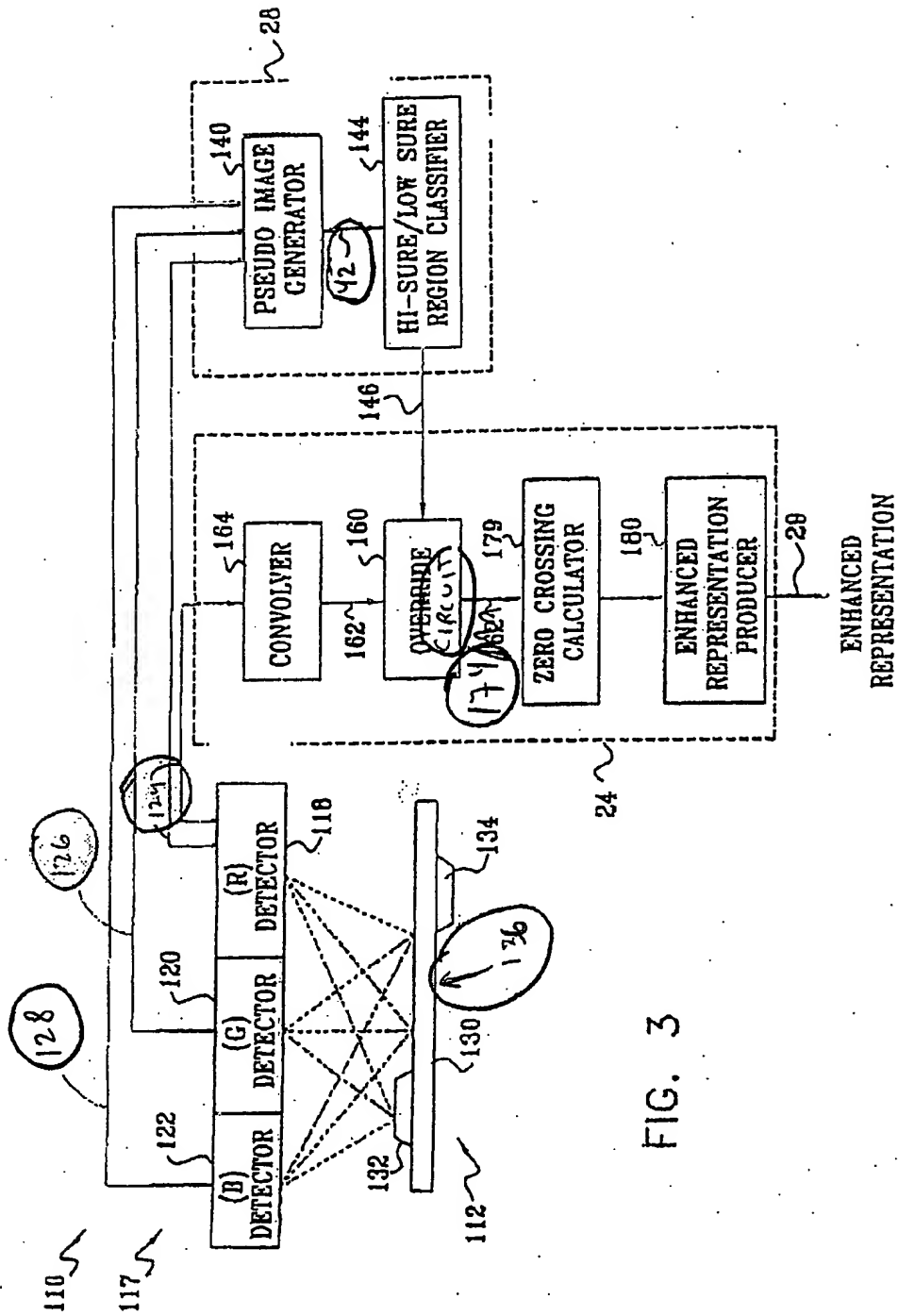


FIG. 3